Technical Specification for Safety Shoes with Two Pair of Socks

Sl No	Description	Specifications
1	Applicable Standards	IS 15298 (Part 2): 2011 & 2016 or applicable latest/amended versions. ASTM F 2413 for Electrical Shock Resistant (ESR)
2	Safety Shoe Type	a) Ergonomically designed work safety shoes for linemen having high workability, wear ability and durability. b) Low Ankle Type with comfortable and extra wide fitting and breathable for long hours of work on uneven and harsh surfaces like soil, gravel, oil, water and different structures like ladders, structural pole materials etc.
3	Gen Specifications	Safety Shoe with light weight made with polyurethane sole fixed by direct injection process.
4	Upper Leather	Corrected grain (CG) chrome tanned plain/printed Buff leather with no splits of olive green colour of thickness minimum 2mm+/-0.2 mm. The leather should be of high tear strength of 120N, durable, longer life. It should be resistant to absorption of water for 30 minutes as per relevant clause.
5	Inner Lining	Quarter & Vamp to be made of minimum 1.0-1.2 mm non-woven which should absorb perspiration and reduce fatigue.
6	Electrical resistance	Electrical resistance shall be minimum 18KV for 1 min.
7	Insole	Insole should be Contoured Polyurethane foam insole extra thick and cushioned for comfort and heel cushioning on prolonged usage. minimum thickness at fore part 3 mm and 8 mm at heel part.
8	Toe cap for protection	Composite toe Cap for protection, toe resistant to an impact of 200 Joules and compression at a load of atleast 15kN.
9	Sole	Soles should be made up of double density polyurethane and fixed by direct injection process using automatic machines. It should be antiskid, acid, alkali, oil and water resistant. It should be heat resistant upto 120 Deg C along with SRC for Skid resistance as per IS-15298.
10	Other	Upper should be stitched with nylon thread. It should have Min 4 sets of eyelets made of non-rusting material. Tongue and collar should be made of Soft padded material.

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11	Sole Design	Must be Flat Sole for maximum Contact Area for Max Traction a. Must be Self cleaning design b. Must have wavy cleat to obstruct any pebbles or small items from being embedded in sole c. Sole design must be flat type to prevent Spine problems.
12	Socks	Cotton nylon blended and free size.
13	Colour	Olive Green
14	Size of safety shoe in inches	5 to 12
15	Marking	The marking should be at the tongue & outsole of the shoes and shall be visible and permanent and shall not impair the quality of the shoe. Each pair of safety insulated shoe shall be marked with the following. i. ISO/BIS marked. ii. Size of shoes iii. Manufacturers name/recognized trade mark should mentioned at the visible place. iv. Month and year of manufacturing of shoe. v. BESCOM name shall be affixed The manufactures standard practice in respect of marking may also be considered.
16	Packing	Each pair of shoe shall be suitably and properly packed in card-board box, the card-board box shall be clearly marked with type and size of shoe, 30-50 Nos each Shoe box shall be packed in a big card board container or as per manufactures standard practice. Any other mode of packing superior to above as per manufactures standard practice may also be agreed.

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(S.T Shanthamallappa)
General Manager (El.)
Quality Standards and Safety,
BESCOM